

Claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over Fujii et al. (5,003,126) in view of Yoshikawa et al. (6,255,778) as applied to claim 1 and further in view of Lin (6,027,802).

Claims 7-10 and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Fujii et al. (5,003,126) in view of Yoshikawa et al. (6,255,778) as applied to claim 1 and further in view of JP 10-251606 (JP '606).

Claim 19 is rejected under 35 U.S.C. §103(a) as being unpatentable over Fujii et al. (5,003,126) in view of Yoshikawa et al. (6,255,778) as applied to claim 1 and further in view of Tanaka (5,455,383).

The Applicants traverse the rejections and request reconsideration.

The claimed invention is a shield flat cable in which a thermally or optically curable adhesive containing a resin having heat resistance and flexibility after curing as a base resin is used. Such an adhesive is particularly suitable to the shield flat cable having a very dense conductor pattern. As compared to a conventional thermoplastic resin as a main constituent, the inventive shield flat cable provides significantly better results even under high humidity conditions with a high connection reliability.

The present invention as set forth in claim 1 includes an adhesive being used for an adhesive layer being in contact with a non-covered portion of the ground line for bonding the shielding member to the cable body with conductive particles being dispersed within the adhesive. Importantly, a thermally or optically curable resin in which a resin having properties of heat resistance and flexibility after curing is used as a base resin. By virtue of this

characteristic feature, even when the flat cable contains a highly dense conductor pattern, high reliability can be ensured as compared to conventional cables.

In contrast with the present invention, when an adhesive containing thermoplastic resin such as polyethylene, polyester and polyamid as a main constituent is used, the adhesive strength of such a conventional adhesive is largely lowered. This is specifically so, when compared with the adhesive strengths of the thermally or optically curable adhesive comprising EVA, PVB or unsaturated polyester being used as base resin as described in the Background section of the present application.

The Examiner appears to ignore the fact that Yoshikawa suggests a transparent adhesive resin having elasticity to be used as a resin such that a transparent adhesive for bonding a PDP panel body and a electromagnetic shield material is provided. Specifically, EVA and PVB etc., are used for that purpose.

The Examiner alleges that it would have been obvious to one skilled in the art to apply the conductive adhesive material as taught by Yoshikawa to the conductive adhesive material (6) used for the shield flat cable disclosed by Fujii to obtain the conductive adhesive having a good bonding property and a high heat resistance. In spite of the Examiner's assertions to the contrary, property of the conductive adhesive as suggested by Yoshikawa are equivalent to adhesive materials that include epoxy or phenolic resin containing hardener, acrylic adhesive compound, rubber adhesive compound, silicone adhesive compound and the like. Their properties are quite different from those of thermally or optically curable adhesive as used in the present invention.

Yoshikawa does not use EVA and PVB as a "conductive adhesive" but as a "transparent

and elastic resin adhesive.” This is used for bonding the transparent base plate (2), the pattern etched conductive mesh member (3), the heat-ray blocking film (5) and the PDP body (20). The Examiner’s interpretation that EVA and PVB are used as a base resin of the “conductive adhesive” is clearly incorrect since EVA and PVB are used as “a transparent and elastic adhesive resin.”

Further, Yoshikawa neither discloses nor suggests that the above mentioned EVA and the PVB are the resin suitable to be used as a base resin of a “conductive adhesive” for a shield flat cable. **Specifically, there is no suggestion that the resin has a heat resistance property and flexibility after curing.**

The Examiner is reminded that to establish *prima facie* obviousness, the examples, contents, average particle size, etc., of conductive particles to be dispersed in the base resin as suggested in Yoshikawa are to be applied to the above mentioned conductive adhesive (6) but not to the foregoing “transparent and elastic adhesive resin.”

Accordingly, the present invention as claimed in claim 1-2, 11-13 and 15-18 is not obvious over Fujii in view of Yoshikawa.

The Examiner further contends that the inventions as set forth in claims 3-5 are obvious to a skilled artisan over Yoshikawa/Fujii in view of Shibata. Shibata suggests a process for producing polyvinyl acetals having superior solubility, transparency and moldability or processability. Thus not only are the objects and advantages of Shibata quite different from those of the present invention but also it does not suggest that a polymer obtained by acetalizing polyvinyl should be used as the base resin of the “conductive adhesive” for a shield flat cable as required by claims 3-5. Further Shibata does not overcome the deficiencies noted above in the

teachings of Fujii/Yoshikawa.

Further, the examiner asserts that claim 6 is obvious over Fujii in view of Yoshikawa and further in view of Lin. However, Lin suggests that the polyester unsaturated adhesives and the plastic resin are mutually equivalent as materials suitable to a cover tape for packaging.

Specifically, Lin suggests that suitable materials for the adhesive layer include cyanoacrylate adhesives, acrylic adhesives, polyurethane adhesives, **polyester unsaturated adhesives**, silicon elastomers, natural or synthetic rubbers, hot melt elastomers, **thermoplastics**, etc.

In other words, Lin does not suggest a thermally or optically curable adhesive having a base resin of “a polyester unsaturated compound soluble in a solvent” as set forth in claim.

Accordingly, even when the adhesive taught by Lin is applied to the adhesive to the shield flat cable as taught by Fujii, it is impossible to make the cable as recited claim 6.

Claims 7-10, 14 and 19 are dependant on claim 1 and are patentable at least for the same reasons. Further, JP '606 and Tanaka do not overcome the deficiencies noted above in the teachings of Fujii/Yoshikawa.

CONCLUSION

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Serial No. 10/070,736

Q68683

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Date: February 24, 2003

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